

# EPC

## Proposal Options and Justification

### 1. Closure and Implementation of alternative drainage

- A. Legislative intent was not to allow a fraction of ADW's recharging our potable water supply to remain open by creating a undefined category with no regulations within state and federal definitions and rules
- B. Jack Riessen failed to get the required information to properly determine the outlets classification or permit requirements as it pertained to investigating an ADW or as a sinkhole injecting any other material. No verification of flow rates to determine if regulatory thresholds were met.
- C. Jeremy Klatt failed similarly when his investigation simply took into account the old determination. His review was not of geological nature and was a simple records review, as well as his emails indicate it fit ADW criteria from his first email after onsite inspection.
- D. It is unclear that Chad Fields had the proper evidence and did not make it to the field.
- E. Claire Hruby was qualified and made an onsite inspection and did in fact determine the outlet fit ADW criteria and recommend closure citing well documented evidence of benefits to groundwater quality in past ADW closures
- F. EPA made a site visit and determined this to be an ADW in EPA terminology
- G. Alternative Drainage fixes three problems: chemical runoff to neighboring properties, damages in the form of excessive downstream moisture and most importantly protects potable water supply.
- H. This particular site is set in a designated drainage area where a CAFO exist and therefore is not permittable as an ADW
- I. A review of the ADW drainage system would indicate that this drainage system is not repairable, as the aged system has become overloaded and can't maintain integrity

### 2. Review Board to subpoena and depose witnesses to verify compliance of ADW rules at improperly documented sites and review if reclassified outlet's do in fact meet criteria of ADW's

- A. The IDNR failed to provide any tangible evidence that this outlet didn't actually meet the ADW criteria ever. Most commonly used deflection was EPA terminology and the idea that it wasn't an injection well

- B. Much of the crucial evidence was verbal in this particular case or simple email threads of IDNR conversation were part of what people used to review the situation
- C. Many errors were discovered as part of my investigation into these ADW's. There are several more Improved sinkholes that likely meet EPA and IDNR criteria for ADW's.
- D. Inconsistencies in reporting and lack of official verification of closures.

### 3. Well Testing at the injection sites as well as neighboring private wells in accordance to the Private Well Group's recommendations

- A. I tested water entering the injection site in 2008 and found contamination of the water.
- B. Iowa DNR has not taken a single water sample from the injection site in question.
- C. Private well test showed numerous contaminants in the Vorhes well in 2009 including pesticides and heavy metals.
- D. Various neighboring wells have also tested positive for excess levels of contamination

### 4. Modify current state rules to include improved sinkhole as a type of injection practice covered by ADW regulations

- A. Current state regulations allow contaminated surface water to be injected via "Improved sinkholes"
- B. Improved sinkholes have no regulatory oversight in Iowa and function identically to ADW's
- C. Create a definition of an Improved sinkhole in IDNR rules that clearly distinguish the differences between improved sinkholes and ADW's
- D. Justification to allow improved sinkholes to remain functional without regulatory oversight

### 5. Drainage and Chemical Contamination study

- A. Farm drainage and chemical runoff review to assess irregular farm drainage mechanics
- B. Various levels of mobility with farm pesticides and common contaminants
- C. Various drainage system designs and soils throughout Iowa
- D. Assess possibility that bioaccumulation of pesticides could be occurring around the state Whitetail deer are known to have been affected and are at continuous exposure to possible toxic levels of chemicals creating public safety issues.
- E. Assess other species that maybe affected by the bioaccumulation of common pesticides